From Boundary Shaker to Boundary Consolidator by Ways of Symbolic Discourses in a Post-Merger Integration Context

Journal:	*International Conference on Information Systems 2016*
Manuscript ID	ICIS-0049-2016.R1
Track:	19. General IS Topics
Keywords:	boundary shaker, boundary consolidator, practice perspective, discursive strategy, symbolic discourse, change agent, merger
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Completed Research Paper

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Abstract

This study analyzes the interactions among individuals engaged in an information system project aimed to support an organization created by the merger of previously independent entities. We draw on a practice perspective to analyze the spanning practices of boundary shakers – mandated change agents – as they attempt to engage with others in cross-boundary collaborative initiatives that aim at changes as part of the post-merger integration process. Our analysis suggests that some of the pre-merger practices were resilient at the end of the project. We suggest that one of the boundary shakers' practices of boundary consolidation through discourses of authoritative knowledge and 'group-making' facilitated the construction of symbolic boundaries between the merging parties, thus contributing to the resilience of pre-merger practices.

Keywords: change agent, boundary shaker, boundary consolidator, practice perspective, discursive strategy, symbolic discourse, merger

Introduction

Post-merger integration (PMI) refers to the process of value-creation that organizations anticipate from a merger or an acquisition[1] (Larsson and Finkelstein, 1999). Despite the benefits that mergers can yield, high failure rates have been reported (Vaara and Monin, 2010; Yetton et al., 2013). Indeed, the PMI phase is often beset by problems such as high levels of employee stress (Empson, 2001), job dissatisfaction

[1] In line with the literature, which generally uses the term 'mergers' to refer to mergers and acquisitions (M&A) (Wijnhoven et al., 2006), this study will use the term 'merger' instead of M&A.

(Alaranta and Viljanen 2004), employee resistance (Vaara, 2002; Stahl and Mendenhall, 2005), or higher turnover intentions (Van Dick et al., 2006).

During PMI, new corporate structures, rules and processes may need to be created and business functions may need to be reorganized. It may even happen that the entire business, from product to market, will require reorganization (Larsson and Finkelstein, 1999; Vieru et al., 2014). Change agents that engage in boundary spanning activities across internal organizational boundaries (Balogun et al., 2005; Levina and Vaast, 2005), are often mandated by upper management to implement PMI changes and to ensure that these changes follow the merger strategic rationale. However, organizational change is a context-based and non-linear process in which planned objectives result sometimes in unintended outcomes (Huy, 2002; MacKay and Chia, 2013).

While employees' resistance to PMI changes has been considered one of the main causes of mergers' failure to live up to their initial goals (Stahl and Mendenhall, 2005), the literature on strategy stresses that examining how change agents interpret and implement change and how they construct their work environment can shed light on some of the unintended outcomes of a change process (Tsoukas and Chia, 2002; Balogun and Johnson, 2005). Change agents often rely on influence tactics (Hartley et al. 1997), use of networks (Ibarra 1993), coercion and authoritative or supportive persuasion (Rivard and Lapointe, 2012) in order to realize their change objectives, be it or not in line with the intended organizational strategy. Some change agents might even not find it compelling to spend energy to foster any change and will resist it (Levina and Vaast, 2005).

Extant boundary spanning literature suggests that boundary spanning represents an important enabler of collaboration during organizational change. Boundary spanning has been defined as a practice that links an organization or a business unit to its environment, including other organizations with which it interacts (Scott, 1998). Considerable research effort has been expended on identifying spanning facilitating mechanisms and entities such as common ground (Bechky, 2003), boundary objects (Carlile, 2002) and boundary spanners (Levina and Vaast, 2005). In the literature, boundary spanners' core function is to facilitate problem solving through translating and actively arranging knowledge to bridge cognitive gaps across boundaries (Star and Griesemer, 1989), which usually are to be left untouched. When boundary spanners are involved in change initiatives across boundaries such as those called for in post-merger integration, they are referred to as *boundary shakers* (Balogun et al., 2005). Their role, as change agents, is to reconfigure, if not remove, boundaries for collaborative work to flow efficiently. Boundary shakers are often involved in power and politics and they usually have to invest efforts to mobilize support for their cause (Balogun et al., 2005).

A merger often implies the implementation of new information systems (IS) that will span across previously independent organizations (Wijnhoven et al., 2006). Research has shown, albeit not in a PMI context, that the success of IS implementation initiatives is highly dependent on effective collaboration among individuals (Luna-Reyes et al., 2005; Suchman, 2002). Given the special context of the PMI process, collaboration initiatives are likely to be challenging since the actors involved abide by different local, social and cultural rules emerging from different pre-merger organizational contexts (Empson, 2001) delineated by pre-merger boundaries and actors' interpretations of what is "at stake" for them (Vieru and Rivard, 2014).

Our main interest is to illuminate the spanning activities of boundary shakers as they engage with others in cross-boundary collaborative initiatives involving change as part of the PMI process. To this end, we examine these activities from a practice perspective (Bourdieu and Wacquant, 1992; Levina and Vaast, 2005), by analyzing boundary shakers' utilization of symbolic capital during the process of post-merger boundary reconfiguration. We conduct a case study within a large metropolitan healthcare center (MHC) that resulted from the merger of three hospitals. The case is an IS implementation project – from project inception until the system was put in production – carried out over a period of six years: the ambulatory appointment information system (AAIS). In implementing this system, top management of the metropolitan healthcare center had the objective to change from three different sets of practices and information systems to a single set of practices and a single information system and to erase the boundaries between the three fields of practice.

Our findings show that some of the pre-merger practices were resilient at the end of the implementation project. Data analysis suggests that this resilience originates in the actions of one particular change agent

(boundary shaker) aimed at maintaining the status quo. Our study makes a number of contributions. First, it extends Levina and Vaast's (2005) conjecture that some agents "use their symbolic capital to contest the legitimacy of others wanting to engage in boundary spanning" (p.356) by introducing the concept of *boundary consolidator*. Second, it extends Balogun et al.'s (2005) notion of boundary shaker by incorporating the concept of symbolic capital. Third, it adds to the existing explanations of how intended strategies lead sometimes to unintended consequences (Balogun and Johnson, 2005). The case study also provides rich data documenting the challenges organizations face when they try to merge fields of practice and support them with a common information system.

Theoretical Background

The Practice Perspective and the Power of Symbolic Capital

Five concepts of the practice perspective informed our study: practice, field of practice, boundaries, symbolic capital, and boundary spanners. The term practice refers to the coordinated activities of individuals and groups in a specific organizational context (Cook and Brown, 1999). Practices are therefore centrally organized around shared practical understandings. Through practice, agents engage in producing, reproducing, or transforming the field of practice structures, which in turn, enable and constrain their actions (Bourdieu, 1977). In his theory of practice Bourdieu (1977) suggests two modes of practice production: 1) through embodiment, which relies on community norms and interpersonal relationships (pertinent to practices within the same field of practice) and 2) through objectification (pertinent to cross-fields of practices), which relies on symbolic or discursive representations of each field's practices and the differences among them. These representations can take the form of work procedures and norms, values, terms, etc. In this study we focus on the objectification mode as we analyze the discursive representations of the differences in practices among fields of practice.

A field of practice may correspond to business units, departments, communities of practice or goal-driven groups in which agents who share unique sets of practices pursue a joint interest (Levina and Vaast, 2005). By engaging in practices, agents establish their membership in a field of practice and, at the same time, differentiate themselves from agents in other fields. From this, boundaries emerge as being created, recreated and transformed through recurrent practices (Levina and Vaast, 2005).

Within a given field of practice, agents are differentiated by their status, which is defined by unequal access to three primary types of individual capital: 1) economic capital (e.g., money), 2) intellectual capital (e.g., expertise) and 3) social capital (resulting from institutionalized relationships of mutual acquaintances) (Bourdieu and Wacquant, 1992). Agents can convert these capitals into a fourth type, 4) symbolic capital, which is associated with the power to categorize any of the other resources as valuable (Bourdieu and Wacquant, 1992), such as the ability to claim relevant knowledge (Suchman, 2002). The members of a field of practice consider relevant knowledge as legitimate and useful for justifying actions by people engaged in working toward a common goal (Suchman, 2002). This 'collective awareness' is usually impeded by a factor that Suchman (2002) calls authoritative knowledge, which refers to certain "ways of knowing that are taken to be legitimate, consequential, worthy of discussion, and useful for justifying actions by people engaged in accomplishing some concerted task" (p.142). Her argument, based on empirical evidence, is that assumptions about who holds relevant knowledge often override the seemingly rational reality.

Thus, symbolic capital represents the ability to successfully define reality, causing others to act accordingly and thereby shaping the practices of others. For one to acquire symbolic capital, one must experience a process of valuation (Bourdieu, 1977). In cross-boundary collaboration, which is based on the possession of intellectual, social, and economic capital, an agent's claims of authoritative knowledge must be perceived as 'valid' by the audience, who then attribute legitimacy to the agent. In this vein, the positions agents occupy in a given field and the forms of capital they possess matter, but only to the extent that others in the situation value those positions and forms of capital, converting them into a source of symbolic power.

Collaboration among people who are members of different communities of practice (Wenger, 1999) or fields of practice (Levina and Vaast, 2005) is difficult, since sustained intra-community collaboration leads to boundaries that are based on shared histories of learning (Wenger, 1999), distinctions between

old-timers and newcomers inside these groups, and on differences between networks of practice that can span multiple organizations (Brown and Duguid, 2001). The differences in meanings and interests between fields are usually negotiated by boundary spanners (Brown and Duguid, 2001; Friedman and Podolny, 1992). Boundary spanners are specific agents situated at different intra- and inter-organizational levels who may perform the roles of knowledge brokers (Hargadon and Sutton, 1997; Pawlowski and Robey, 2004), translators (Yanow, 2000), or information gatekeepers (Katz and Allen, 1985), which implies that they assess knowledge at the boundary and select the knowledge they consider pertinent. Boundary spanners engaged in change agency are defined as boundary shakers, agents "involved in translation, endeavoring to mobilize others to support their cause" (Balogun et al. 2005, p. 264). Boundary spanners may be nominated or may emerge, but to be effective they must be viewed as legitimate participants in the fields of practice being spanned and recognized as negotiators between fields, and they must be motivated to act as negotiators (Levina and Vaast, 2005). However, as Levina and Vaast (2005) found in their study, some boundary spanners may use their formal power to obstruct the collaboration efforts across boundaries and resist changing.

Discursive Legitimation Strategies as Explanation for Unintended Outcomes

The concepts of field of practice and symbolic capital seem crucial in explaining the unintended outcomes of change processes during cross-boundary collaboration initiatives in a merger context. The power relations in a field of practice determine whether selected strategies eventually get retained or altered in a field. The two major sources of systemic power are critical resources and discursive legitimation (Phillips et al., 2004). While by critical resources we understand economic capital (i.e., venture capital) and social capital (i.e., a customer base), discursive legitimation represents symbolic capital that emerges through a political rationalization process of downplaying one's own interest and making explicit the opponent's interest (Bourdieu, 1993). In this view, legitimacy or its opposite term, illegitimacy, are created in relation to discourses that provide the frames of mind with which individuals make sense of particular situations. In the context of PMI, legitimation, as creating a sense of positive, acceptable status quo and delegitimation, as creating a negative sense of change, may represent resistance to change initiatives (Vaara and Monin, 2010).

Legitimation involves several discursive strategies to legitimate mergers such as, teleological, historical, cosmological, ontological, and value-based (Suddaby and Greenwood, 2005), or normalization, authorization, rationalization, moralization, and narrativization (Vaara et al., 2006). In this study, we analyze two discourses: 1) authoritative knowledge discourse (Suchman 2002); and 2) 'group-making' discourse (Bourdieu, 1987). We operationalize them as symbolic capital-based discourses (Bourdieu, 1977). We view them as discursive strategies through which senses of legitimacy or illegitimacy are created.

Discourses are persistent systems of thought (including ideas, attitudes, beliefs and practices) that enable and constrain what can be thought, said and done (Foucault, 1979). As such, the discourse of 'group-making' is characterized by "logic of existence by delegation" or "by proxy" (Bourdieu, 1987). The social reality, according to Bourdieu (1987), can be objectively divided into different social spaces, the occupants of which are said to be sharing objective similarities and thus constitute groups or classes. But, Bourdieu argues, no real group exists without some agent naming the group and therefore bringing it into existence. Classes exist "only inasmuch as [...] historical agents [...] have succeeded in transforming what could have remained an 'analytical construct' into a 'folk category' [...] produced and reproduced by the magic of social belief" (Bourdieu 1987, p. 9). Thus, a group exists or emerges when there are agents capable of imposing themselves, who are authorized to speak and act officially in its name. In this view, the production and reproduction of groups by creating symbolic boundaries is seen as necessary during agents' participation in struggles over the classification and representation of communities and represents an act of resistance to any action that may affect the group structural integrity. Symbolic boundaries are conceptual distinctions made by organizational members to acquire power status, monopolize resources, categorize people and practices and generate feelings of similarity and group membership (Lamont and Molnar, 2002).

Methodology

This research was conducted as a case study, which represents a research approach which focuses on understanding the dynamics existing within single settings (Eisenhardt and Graebner, 2007). In this way, the researcher is able to identify emerging dimensions of the phenomenon and the relationships that emerge from the study through the researcher's interaction with the organization members within their context.

We chose an implemented IS project within one organization that was engaged in the process of post-merger integration. We focus on one IS project (the unit of analysis) that was expected to enable the post-merger integration of separate but similar site-based departments (ambulatory services). The selected organization was the Metropolitan Healthcare Center (MHC – not the real name), a Canadian tertiary care teaching institution. The MHC is the result of a "merger of equals" of three independent teaching hospitals with over 1 million patient visits per year: two Adult hospitals (the Downtown and the Midtown) and the Pediatric Hospital. The merger was initiated with the goal of creating a mega-hospital to provide modern health care by implementing a "best practices" approach for coordinating care. Although studies have shown that the participants in organizational processes do not forget key events in these processes, it is possible that a participant-informant in a retrospective study may not have judged an event as important when it occurred and therefore may not remember it later (Leonard-Barton, 1990). To avoid these shortcomings, we obtained access to a number of emails that team members exchanged during the IS implementation. We also followed Leonard-Barton's (1990) recommendation to engage in informal conversations with individuals who were members of the project team because useful data may emerge from this type of interaction. This activity gave us the opportunity to understand the meanings held by the organizational members with regards to their organizational culture in terms of values, norms and practices.

We conducted semi-structured interviews with the persons who had held key roles in the project (see Table 1). The interviews (see the Appendix for the interview protocol) were supplemented by archival documents (e.g., strategic planning sessions, management presentations, emails, and communications planning), which offered a source of triangulation for the themes that emerged from the interview data. Due to their sensitive content and the Canadian data privacy laws, we were allowed to consult these documents only on site. These documents were used in three ways. First, the various reports and presentations were used to assist us in putting together the project's chronology, including identifying the dates of important events and decision junctures. Second, emails and management presentations were used to formulate and refine interview questions. Third, reports and meeting minutes were used to corroborate and validate interview reports.

Project Phases	Function at the outset of the project	Referred in the text as…	Site	Background
Phase 1 and 2	Ambulatory Services Manager (ASM)	Midtown manager	Midtown	Started in 1990 as a clerk in one of the clinics; manager of different outpatient clinics.
	ASM	Downtown manager	Downtown	Worked in various clerk positions in different clinics within the Downtown hospital since 1991.
Phase 1 only	ASM	Pediatric manager	Pediatric	Started in 1995 as project manager
Phase 2 only	IS Project manager	IS Manager	MHC	Over 25 years in the IT industry; hired in 2000
	IS Specialist		MHC	Nurse and Computer technician background; hired in 1998
	IS Specialist		MHC	Worked in a bank before being hired by the MHC; hired in 2001

Table 1. List of Interviewees

The interviewees were selected following a snowball sampling procedure and, like in Balogun et al. (2005), met the definition of a boundary shaker (individuals that were mandated by the upper management to implement the new system across the old boundaries of the pre-merger entities). A total of 12 interviews (6 interviewees in 2 rounds of interviews) were performed that were based on a pre-designed protocol (Appendix) and lasted between 30 and 45 minutes. We interviewed the three site-based ambulatory services managers and three IS professionals (one manager and two specialists). Table 1 summarizes the profile of the participants to the study.

Each interview started with an informal conversational approach in which questions emerged from the context. This approach was followed midway through the interview by a standard format strategy that clearly covered the topics identified in the interview protocol. The interviews were recorded and transcribed. In a few instances, when clarifications were required, follow-up questions were asked via phone or email. Interview questions focused on understanding, from the participant's standpoint, the history of the project collaboration practices, claims of relevant knowledge, differences in system's functionalities between the initial and the go-live phases of the project, as well as the personal implications of the merger. When no new information was revealed during interviews, data collection was terminated.

Initial Coding List Categories	Differences in practices
	Fields of practice
	Boundaries
	Cross-boundary collaboration practices
	IS design
	Individual capital
	Role of boundary shakers
	Symbolic discourses
Emerging Category	*Boundary consolidation*

Table 2. Coding Categories

The interview data were analyzed in an iterative process (Eisenhardt and Graebner, 2007) by cycling between data, emerging themes, and relevant literature to develop a deeper understanding of the dynamics of the cross-boundary collaboration during the IS implementation process. The coding method was iterative, using both the initial coding scheme and open codes and it was a two-stage process. First, we created a provisional "start list" of codes (Table 2) prior to the interviews. Our theoretical perspectives informed this initial list. Second, the interview transcripts were introduced into a database, read carefully and relevant portions highlighted. The highlighted portions were then keyed into the database into a field called "evidence" as chunks of rich text. All of the transcripts were coded using the preliminary set of codes. In line with our theory-building objective, we remained open to emerging themes, which can lead to the creation of new codes and categories when appropriate (Miles et al., 2013). Thus, the key category of boundary consolidation was created. Following this, we enter a new coding iteration, going back to the transcripts and coding them anew to take into account the new category. We relied on authors' agreement and consensus to reconcile any coding disagreement.

The Case of the Ambulatory Appointment Information System (AAIS)

In the pre-merger context, the MHC hospitals developed their own sets of applications, both for the clinico-administrative and administrative application portfolios. Two technological platforms were used for site-specific systems. One was used by the Pediatric site and the second by the Adult sites. Also, each site had its own medical patient index and patient ID card, used several and separate patient scheduling systems, managed beds and emergency rooms according to the internal site perspective, operated its own and distinct order entry and result reporting system and produced statistics specific to the patient stays

within the specific sites. The site specific approach was also present for the functionality of the IS providing clinical and volume data such as ambulatory patient scheduling, pharmacy, labs, radiology, operating rooms, etc. According to the MHC IS Strategic Plan, the post-merger application portfolio needed to adapt to a seamless integrated organization that would result from the redesign of the business processes. The patients would have a single number and ID card linked to a single record number used by all MHC sites. According to the IS Project manager, *"because of the expected magnitude of the process redesign"*, keeping legacy systems in use was considered to be an ineffective cost option.

Ambulatory care represents any medical care delivered on an *outpatient* basis. Many medical conditions do not require hospital admission. Most medical investigations can be performed on an ambulatory basis, including blood tests, X-rays, endoscopy and even biopsy procedures of superficial organs. An ambulatory appointment information system (AAIS) allows clinical staff to manage ambulatory care information, including appointments, registrations, attendance, and waiting lists, and provides statistical information on volume of activity and patient load by healthcare provider.

Prior to the merger, the Pediatric ambulatory services were using a mainframe-based antiquated system that was not able to provide adequate appointment booking and patient related statistics to management. At the other MHC sites, some ambulatory clinics were using basic DOS-based booking systems (at Midtown site), whereas others were still using paper and pencil (at Downtown site). Most of the problems associated with those approaches when managing ambulatory appointments were: incapacity to manage patient flow (e.g. too many new patients scheduled resulting in delays); no automatic coordination of appointments; impossibility to create an appropriate appointment structure; unavailability of useful statistics related to diagnoses, type of visits, type of patients, procedures; difficulty for the hospitals' Ambulatory Services management to implement their policies because of lack of information (e.g. clinic cancellation reports were unavailable)

During the pre-merger phase, a collaborative agreement was signed between the future MHC and the AAIS vendor (hereafter called Omega, a software company), to develop an Oracle-based application for ambulatory services appointment scheduling. A project team was created to supervise the work of developers from Omega in order to configure Omega's software package to fit MHC's needs. The project commenced in January 1997 and consisted of two phases. In Phase I, the project team appointed by the upper management consisted of the three managers of ambulatory services at their sites (Downtown, Midtown and Pediatric). Each site was using a different set of ambulatory practices based on pre-merger hospital-based norms. During this early stage of the project, the team members had to initially start a process of knowledge sharing where common ground would be established to be able to start an efficient collaboration and propose a first configuration of the new IS.

From the outset, teamwork was organized by peer-based collaboration without a formal project manager from the user side. The three managers soon realized that they needed someone to follow up on decisions after each meeting and act as a liaison with the Omega developers. The other team members adopted her immediately as a leader as they found her charismatic, experienced and respected in her work community. Retrospectively, the Pediatric-manager saw herself, in the context of the project, as being *"the spearhead … the catalyst… the person that is the glue that holds this together and gives direction, keeps people on track"*. She considered herself a leader and found it normal to take the lead in the implementation process. Moreover, the idea of the new system had been put forth by her hospital, and she already had a good idea how the new system would make the Pediatric ambulatory clinics more efficient while maintaining pre-merger practices.

Team meetings involved exchanging clear information about the needs of each member's own department in order to effectively negotiate and convince the others of the need for specific system features. The outcomes of these discussions were often a compromise representing the result of various claims of legitimate knowledge made by the manager from the Pediatric site based on her past experience in implementing clinical administrative IS.

In the spring of 1998, Omega announced that they had a prototype ready to implement at a Beta site. The members of the project knew that as part of the process of Beta testing the configurable software would need to be "tweaked" many times in order to accommodate all future users. Because MHC upper management considered the project to be the initiative of the Pediatric site, it chose it for Beta testing in May 1998. During the implementation, the Pediatric manager submitted requests concerning how to

adjust/modify the software package's functionalities because she was persuaded that, due to its procedural and clinical differences, the Pediatric site would never really be integrated into the rest of the MHC. The implementation of the new AAIS (Phase I) was successfully finalized at the Pediatric site at the end of 1999.

In early 2000, MHC upper management recognized that after almost two years of post-merger integration, while the main administrative functions such as Finance, HR, Payroll, and Purchasing were fully integrated, the clinical and clinico-administrative services were integrated only on paper. The reality was that the Pediatric site had kept their clinical independence, norms and site-based culture. The system was successfully deployed at the Pediatric site. However, several risk factors that could affect the outcomes of the project were identified. First, the configuration of the system didn't take into consideration the co-existence of multiple master patient indexes. In the version being used, the function of merging two medical records (one from each main Adult site) was not working properly. If implemented like that, it may have caused confusion and concerns among users regarding the reliability of the system. Second, the system that was installed at the Pediatric site was configured to mostly reflect practices of clinics in a standalone healthcare institution.

In this context, the MHC upper management realized that in order to successfully implement a unique set of administrative ambulatory practices, they had to re-design and deploy a second, multi-site version of the AAIS at the Adult sites (Phase II). In 2003, implementation of the AAIS at the Adult sites was successfully completed. While one of the goals of the pre-merger MHC strategic plan was to implement a common set of administrative practices, at the end of AAIS project, MHC ambulatory services presented two different sets of practices: one, at the Pediatric site, that preserved pre-merger norms and another, at the Adult sites, that can be described as new practices common to both sites.

In the present study we focused only on Phase I of the project because of the unintended outcomes of the project.

Findings

It is important to note that in analyzing the case data and reporting the findings, no value judgment was made on the desirability – or lack thereof – of the integration of the three information systems. Indeed, it may very well be that Pediatrics was actually different from the other three sites and that they indeed required a different system. As such, the analysis below remains relevant, whether the Pediatric manager was right or wrong in claiming that her site was different from the other two.

Theme 1: The Emergence of Symbolic Capital

Agents in cross-boundary collaboration are expected to bring expertise specific to their role to the endeavor at hand. For example, in a new product implementation effort, participants bring distinctive expertise to shape the features, performance, and production processes for the new product (Carlile, 2002). Their distinction is accentuated by the fact that agents on each side of the boundary have accumulated different kinds of capital (Bourdieu and Wacquant 1992) and their respective fields of practice were significantly different. Each of the three ambulatory service managers, who have worked for several years in the pre-merger different hospitals, have accumulated distinct knowledge, experience and expertise in terms of managing patient registration, appointments, waiting lists, etc. In the first few months of Phase 1, the three managers had to share their knowledge of the ambulatory procedures used in each of their site. To their surprise, they realized that, even though those site-based procedures seemed similar, their execution varied from one field of practice to another. Table 3 summarizes the differences in practices between the three MHC sites as seen by the three managers.

Downtown vs. Midtown sites	**Adult sites vs. Pediatric site**
Different approaches at the two Adult sites: *"I would say fairly different. There were a lot of procedural differences in terms of how the clerical tasks were done, different forms were being used, and different billing practices were in place. It was from an administrative support standpoint a*	Challenging differences between Adult sites and Pediatric site: *"Well you know, the Pediatric [site] is a little different… it's a different setting… we are small and we're different, but not like a small adult*

significant amount of difference between the [Adult] sites […] There are different sites involved and people who do business differently" (Downtown manager); *"Because of the physicians [at the Adult sites], I have never been able to standardize anything. So for example, if you work in Clinic A on Monday and you're well trained and you know you have stamped this paper, put two labels and made a copy of the Medicare card. Tomorrow they shove you in another clinic, you have no idea what to do because that doctor wants three labels, and the Medicare card instead of putting it like this, it should be like that. Everyone wants their own way and it is physician driven" (Midtown manager)* *"In the first three months, that knowledge transfer, in terms of how they [the other sites] do it versus how we [Downtown site] do it, it was a very novel thing because you tend to think the way you do things is the entire universe right and so it's been a wakeup call to discover that there are all kinds of different ways of approaching the same process, the same basic function" (Downtown manager)*	*[site]" (Pediatric manager);* *"That was one of our early challenges because what we discovered was the way that the clinics work at the Adult hospitals versus the Pediatric was very, very different […] In fact a lot of the differences between procedures… came along many times as a result of discussions around the user group table during the development […] As far as the Pediatric, it is black box. I know a little bit because I take my children there when they are sick, that's it" (Midtown manager)* *"At the beginning it was very much sort of each keeps their own practices. As far as I'm aware the Pediatric is standalone… And they continue to be standalone. They don't seem to have a huge amount of connection in the areas that I deal with." (Downtown manager)*

Table 3. Differences in Ambulatory Practices at the MHC sites

At the outset of the project, the three team members were not aware of significant differences between their practices due to the fact that they never had to interact before. Not only had they never met before, but they also had never been involved in the development of a similar IS. Even though officially employees of the MHC, the fact that they were coming from different hospitals and now were supposed to share knowledge and develop a common system is clearly suggested by two of the ambulatory managers:

> *"So it took us a little while to do that because, you know, there was a group of people that had never met each other before or by and large so figuring out a way to work together was initially I guess a bit of a challenge" (Midtown manager); "Actually we didn't know each other. We had never met. I met [Downtown manager] there; I had never met him before. You didn't think of yourself as [MHC]. You thought of yourself as, I'm site specific" (Pediatric manager)*

The case data show that the three site-based managers appointed as change agents (boundary shakers) by the upper management possessed significant amounts of social and intellectual capital accumulated in time within their fields of practice at the outset of the implementation process. Even though the change agents never met before, they were aware of the other agents' hierarchical position and had heard of their professional reputation within their respective fields of practice. They went through a quick process of valuation of each other's accumulated individual capital at the outset of the project.

> *"[The Pediatric manager] was very quickly taken on a leadership role… We all respected the hell out of her. [The Downtown manager] was always in there advocating for her clerks." (Midtown manager)*
>
> *"[The Midtown manager] was very good at arguing the pros and cons of a certain functionality." (Pediatric manager)*
>
> *"I would say [Midtown manager] for his experience of how things worked at Midtown because he's been there a lot longer than me." (Downtown manager)*

However, only the Pediatric manager tried and successfully converted her accumulated intellectual and social capitals into symbolic capital to claim authoritative knowledge.

> *"IS is my field of competence, so it's very easy to talk to a programmer, and I can turn around and talk to the user because I can adjust the language. I provided a good sort of leadership in that sense […] I had fought for getting it for the Pediatric site, because there's nothing worse than implementing a new system and losing functionality of the things you had before […] I'm pretty sure they [at the Adult sites] don't really care what system we have due to the fact that the Pediatric clinics don't need to communicate any patient data to the clinics on the Adult side of the MHC (Pediatric manager)*

While during the project meetings most issues were solved by an immediate consensus or through persuasion based on trade-offs, in some rare instances the Pediatric manager used her accumulated symbolic capital to unilaterally make a decision. For example, when she asked for a specific modular interface to be built into the system, the Downtown manger didn't understand its utility for her site's clinics. The Pediatric manager notes that she tried to argument her need but to no avail:

> *"[Downtown manager] wouldn't let go. She couldn't understand why we needed that, and at one point it was like, look, I'm going to get it for the [Pediatric], whether you understand or not, I'm getting it" (Pediatric manager).*

Theme 2: Resisting Change by Boundary Consolidation

Pediatric manager engaged in symbolic discourses of 'group-making' that would present her as an authorized voice to represent the Pediatric population and its needs with respect to the ambulatory clinics. She described the members of the Pediatric field of practice as being completely different from the members of the other sites of the MHC and referred to herself as 'we' and 'us'. During the system implementation at the Pediatric site she tried hard to classify her field of practice (Pediatric ambulatory services) as being unique compared to the other two fields of practice in front of the other two change agents and to refute any idea of integration.

> "*I think in terms of like structure and follow up and whatever, I provided a good sort of leadership in that sense. […] I have to say, we being, the Pediatric, probably influenced a lot because the whole project actually came from a needs analysis that we had submitted […]. They moved Orthopedics from the Downtown and centralized it at the Midtown. I think they've redone some of their management structure in terms of that. But that didn't affect us. So the Pediatric will remain independent" (Pediatric manager*)

Although the mandate of the boundary shakers was to entice the others to collaborate and alter the pre-merger boundaries, the Pediatric manager focused all her efforts on what was "at stake", protecting the existing boundaries between her field of practice and the rest of MHC. She used her symbolic capital to promote the idea that Adult sites and the Pediatric site were engaged in business processes that were so different that they could not be integrated into the same system. A specific type of data confidentiality was one of her main arguments that the Pediatric site was different from the two Adult sites and due to its procedural and clinical differences her site should never be integrated with the rest of the MHC.

> *"You have convictions about the way certain things should function or not. For example, confidentiality of information is a big topic… For example, 'I'm calling, I'm in the middle of a divorce; I don't want my husband to know my phone number'. So the big question is how do you block that information, are you able to flag it? So obviously for us in Pediatric it's a huge issue because we deal with that kind of situation. On the adult side, not that much." (Pediatric manager)*

On one hand, the Pediatric manager thought that the Pediatric site should keep its clinical practice independence, while the main administrative functions, such as Finance and HR would be fully integrated in the structures of the MHC. Pediatric manager was convinced that the development of the new AAIS had more to do with implementing a system that would make the management of the ambulatory services more efficient, than with the merger. Thus, she tried to convey the message that it was in the Adult sites' interest to concentrate on their own clinical data.

> *"I'm pretty sure they [Adult sites] don't really care what system we have due to the fact that the Pediatric clinics don't need to communicate any patient data with the clinics on the Adult side of the MHC." (Pediatric manager)*

Therefore, at the end of the implementation project (Phase II), the resulting common AAIS had two database instances, one for the Pediatric site, implemented in Phase I, which enabled the preservation of the pre-merger practices and another one for the Adult sites that enabled new common administrative practices (Phase II). Our data analysis suggests that at the end of the project, the boundary between the Pediatric and the rest of the MHC sites in terms of ambulatory services were still up instead of having been erased, which would have been the logical outcome of the PMI process. Figure 1 illustrates the three managers' actions and their outcomes during the AAIS implementation process.

> *"I would say we [Adult sites] are now reaching the point of blend I suppose because we're trying to take best practice from each site [adult] and putting it together […], but as far as I'm aware, the Pediatric is standalone" (IS manager)*

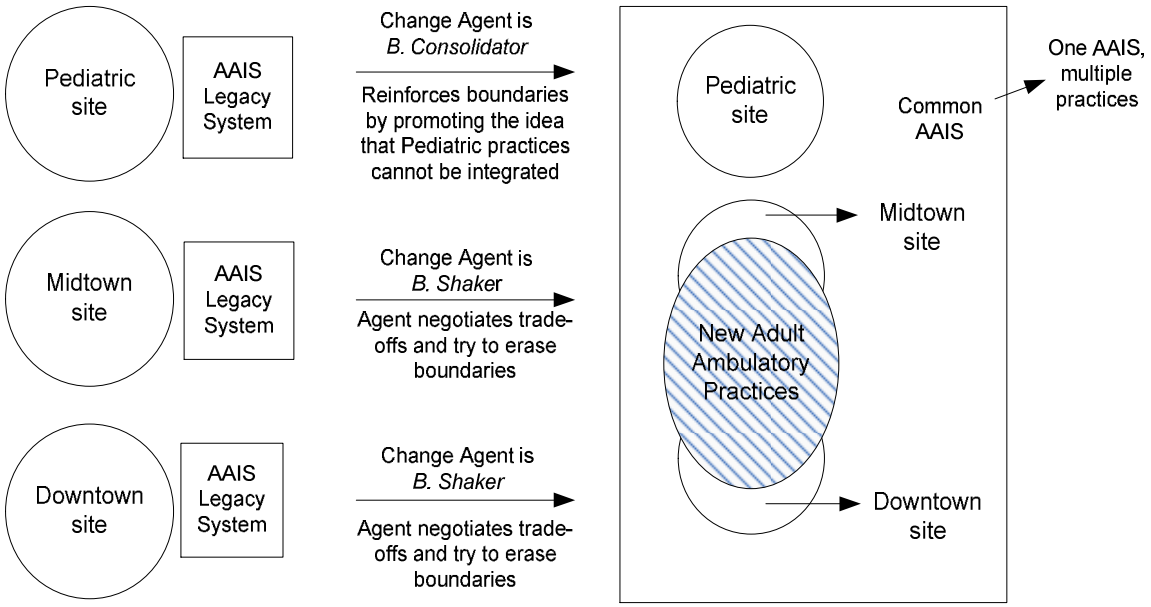

Figure 1. Failed Integration: Boundary Consolidator vs. Boundary Shakers at the MHC

Discussion and Conclusion

We report the findings of a case study of an IS implementation project aimed at unifying the ambulatory practices of a large healthcare center that resulted from the merging of three hospitals and supporting them with a unique information system. In this project, three department managers were appointed as as site-based team leaders and nominated as boundary shakers. The case focuses on the actions of one of the department managers, the Pediatric manager, and shows how she used her symbolic capital and made claims of authoritative knowledge to consolidate pre-merger boundaries in order to resist the IS integration and legitimize the exclusion of her department from the merging exercise.

This boundary reinforcement represents an unintended outcome of an intended organizational change imposed by a merger. The Pediatric manager instead of acting as a boundary shaker (cf. Balogun et al., 2005) actually acted as a boundary consolidator by engaging in discourses of authoritative knowledge (Suchman, 2002) and 'group-making' (Bourdieu, 1987) that facilitated her actions. Based on symbolic discourses, boundary consolidation represents a means for resisting the change brought in by a merger. The two discourses represent the basis for making claims about specific actions of boundary shakers. While these discourses are not specific to an organizational context, the events that triggered them in our case study are specific to a post-merger integration environment.

These symbolic discourses were necessary for the Pediatric manager to represent her field of practice during the struggle over classifying the Pediatric site as being unique and its environment not being ready to be included within the MHC. The existence of a relationship between Pediatric manager's discursive

strategy and her use of the accumulated symbolic capital pointed to the fact that the Pediatric manager pursued not only individual, but also collective interests to resist to the change in practices. The Pediatric manager's collective representations inculcated the reality of the existing boundaries between the Pediatric site and the Adult sites as something that could not be changed during the process of system implementation. It also threatened to trigger "power dynamics that undermine collaboration" (Levina and Vaast 2008, p. 310). The Pediatric manager mixed symbolic group-making and claims of relevant knowledge that skewed the existing power dynamics within the project team and helped her justify the way the system was configured at the end of Phase I (reflecting pediatric site pre-merger practices).

Contribution #1: Introduction of the Boundary Consolidator Concept

By addressing the boundary spanning literature, the main contribution of this study relates to the theoretical development of a practice perspective-based discursive analysis of the outcomes of a cross-boundary IS integration process in a PMI context, which includes the concept of *boundary consolidator*. The Pediatric manager illustrates what Levina and Vaast (2005) describe as a boundary spanner with symbolic capital who deliberately "fails to develop an interest in developing a new joint field" (p.356). The actions of the Pediatric manager suggest that sometimes change agents like boundary shakers use their symbolic capital to reinforce existing boundaries and obstruct boundary spanning when personal or local interests are at stake. Thus, instead of being a boundary shaker – a boundary spanner in charge of "making changes that necessitate shaking boundaries" (Balogun et al., 2005, p.262) –, the agent becomes a *boundary consolidator*. Boundary reinforcement or consolidation encompasses the ways in which an individual, member of a professional community (in our case a field of practice) internally sets and reclaims its boundaries by increasing member awareness of boundaries and emphasizing community identity (Faraj and Yan, 2009).

In the AAIS study, the Pediatric manager, who was mandated by the MHC upper management to implement PMI changes and remove boundaries for collaboration by bridging cognitive and knowledge gaps across the pre-merger boundaries, did exactly the opposite by reinforcing the fences between the Adult sites and the Pediatric site. Indeed, instead of focusing on commonalities and dependencies between the three sites, the Pediatric manager's efforts and energy were invested in highlighting the differences (e.g. children vs. adult patients, no information exchange between the Pediatric and the Adult sites) as well as the uniqueness of the Pediatric site (e.g. in terms of procedures, clerical tasks, etc.). The Pediatric manager's forerunner attitude as well as her legitimacy, based on her charisma, her experience and her reputation, enabled her to mobilize support around the idea that the Pediatric site on one side and the Adult sites on the other, had different ways of working and required different AAIS. She was able, through her authoritative knowledge and 'group-making' discourses, to redefine the "initial" strategic rationale of the AAIS and alter the project team's reality by causing the project to deviate from its original objective of an integrated system to finally end up with the development of two separated AAIS. Thus, the Pediatric manager did not play the boundary shaker role (Balogun et al., 2005) as it would have initially been expected by the upper management, but a boundary consolidator one.

Contribution #2: The Role of Symbolic Capital in Consolidating Boundaries

Empirically, this paper enhances our understanding of discursive legitimation during the process of PMI by identifying two symbolic discourses, *authoritative knowledge* and '*group-making'* that lead to the reinforcement of the pre-merger boundaries in the case of the Pediatric site. Second, our study extends Balogun et al.'s (2005) notion of boundary shaker by suggesting that in a specific context such as mergers, some change agents will use their individual capital to interfere with planned change by engaging in legitimation discourses to consolidate existing boundaries.

In the AAIS case study, the Pediatric manager used her symbolic capital and took advantage of the fact that the first beta testing to configure the AISS was implemented at the Pediatric site, to submit change requests to adjust/modify the software package's functionalities. These changes were meant to reflect Pediatric site's pre-merger practices without considering the Adult sites' contexts and specific needs. These change requests were part of the Pediatric manager's discursive strategies to separate the Pediatric ambulatory practices from the rest of the MHC. One possible explanation of Pediatric manager playing

the role of a boundary consolidator may stem from the fact that she was simultaneously playing two opposing roles. As a member of the project team, she played a *change agent*[2] role and, as the ambulatory service manager, she played a *change recipient*[3] role (Ford et al., 2008). The Pediatric manager was both the implementer and the recipient of change. As a change agent, she was formally designated to implement the PMI changes and ensure that the potential turbulences caused by such major organizational change would not affect the main goal of the project, that is, having a cross-boundary integrated system. However, as a change recipient, she was responsible to adapt the new practices imposed by the new AAIS on the Pediatric ambulatory service as well as minimize the prospective disruptions brought to the Pediatric local practices. To do so, the Pediatric manager used her symbolic capital and various discursive strategies to demonstrate that, the Pediatric site was different and that status quo should be maintain. Thus, it is possible that her dual status might have helped her consolidate the boundaries around the Pediatric site.

Contribution #3: Strategies to Consolidate Boundaries

Our study enriches the existing explanations of how and why intended strategies sometimes lead to unintended consequences (Balogun and Johnson, 2005). Research drawing on socio-cognitive theories had already examined the role of sensemaking (Balogun and Johnson, 2005), improvisation (Wagner et al., 1999), social interactions (Dulipovici and Robey, 2013), organizational identity (Vieru and Rivard, 2014), and past experience as sources of collective understanding, which may ultimately affect the outcome of an organizational change (Weick, 1993). These theories contend that individuals' thoughts about IT-led change are not formed in isolation, but based on collectively shared understandings of what the technology is or how the technology can affect their practices. In this sense, Balogun and Johnson (2005) suggest that unanticipated consequences are the result of organizational actors creating mental frameworks of references useful for the interpretation of reality through social interactions. In the AAIS case study, one strategy used by the Pediatric manager to alter the project team's mental framework was by voicing issues (Dutton and Ashford, 1993).

An *issue* is a "subjective 'chunk of knowledge' enacted by a stakeholder in a particular place and time within the project" (van Offenbeek and Vos, 2016, p.46) and can be conceptualized as "knowledge at a boundary". Issues can also be considered as vehicle for knowledge transfer, transaction and transformation, which will affect boundaries. Issues that have high levels of commonality and dependency between stakeholders should weaken boundaries whereas issues with low levels of commonality and dependencies should consolidate boundaries (van Offenbeek and Vos, 2016). Also, as issues are intertwined with the stakeholders' legitimacy and symbolic capital, some of them will have more influence than others. In the AAIS project, the Pediatric manager relied on her symbolic capital to ensure that the issues that she voiced would be considered as authoritative knowledge. She also voiced issues that would minimize the possible commonalities between the Pediatric site's practices and those of the Adult sites' in order to consolidate the boundaries between the MHC sites. Thus, our study extends Balogun and Johnson's (2005) work by providing a practice lens and an issue management perspective on why and how social processes of interaction between managers engaged in making sense of intended changes may lead to unintended outcomes.

Contribution #4: Resistance to IS Implementation

As for addressing the needs of practitioners, this research pertains to a critical area for IS project managers: resistance to the implementation of a new IS (Lapointe and Rivard, 2006; Dhillon and Caldeira, 2010). It has been suggested that change agents may inhibit wider adoption of a new system that would facilitate change of practices (Schultze and Boland Jr., 2000), since potential users perceive the

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[2] "Change agents are individuals "responsible for identifying the need for change, creating a vision and specifying a desired outcome, and then making it happen. They are the people responsible for the formulation and implementation of the change [...]. Change agents, therefore, include those engaged in the actual conduct of the change, as well as those who call for and sponsor it." (Ford et al., 2008, p.362).

[3] Change recipients refer to those individuals "who are responsible for implementing, adopting, or adapting to the change(s)." (Ford et al., 2008, p.362).

new system as "for nominated boundary spanners to decide how to use" rather than "for everybody to use" (Levina and Vaast 2005, p. 357). Rivard and Lapointe (2012) proposed a taxonomy of responses which could be used to react to resistance: 1) Inaction (unawareness, deliberate ignorance, and impotence), 2) Acknowledgement, 3) Rectification (congruent vs. non congruent) and 4) Dissuasion (coercion, authoritative persuasion, supportive persuasion). However, in the AAIS case study, the Pediatric manager used discursive strategies akin to some of the responses proposed by Rivard and Lapointe (2012), not to react to resistance, but to consolidate the boundaries between the Adult and Pediatric fields of practice. Indeed, the Pediatric manager through various discursive strategies, tried to modify the project's initial strategic rationale by highlighting the differences between the fields of practice and persuade the rest of the project team that the project outcome would be better represented by two separated systems. Such strategies are similar to the non-congruent rectification and persuasion responses proposed by Rivard and Lapointe (2012). Thus, in our study we found that the Pediatric manager instead of using her symbolic capital to "shake" the boundaries, she strengthened them by acting as a boundary consolidator.

The main limitation of this study might be that it attempts at generalizing only from empirical statements to theoretical statements from a case study (Lee and Baskerville, 2003). However, it has been shown that statistical, sampling-based generalizability may be an unsuitable goal for qualitative studies (Denzin and Lincoln, 2000). The MHC case is built on a strong historical foundation and deals with issues of central importance to our research which makes it purposeful (Patton, 2015). Learning from this case can now be transferred to other contexts for further refinements that eventually will offer statistical generalizability. Looking at industry level data and data from other settings may help overcome this limitation and provide new understandings.

The theoretical explanation offered here opens up avenues for more in-depth explorations of some of the more complex processes associated with the dynamic relationship between the social aspects (agents) and the material aspects (IT) of organizational change. Alternative perspectives such as *sociomateriality* (Leonardi, 2013), could be used to shed further light on, for example, how practices are negotiated through IS use processes rather than being permanently and systematically selected (e.g. best practices) at a particular moment in time. We argue that, in taking this approach, a more systematic analysis can be performed to examine how technologies, people, and organizations continuously interact.

Acknowledgements

The authors would like to gratefully acknowledge the FRQSC funding (no. 2015-NP-180713) received for this project.

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Appendix. Interview Protocol

Concepts	Questions
Individual status	What was your role in the previously independent hospital? What was your role in the project?
Fields of practice at the outset	At the beginning of the project, were there any differences in work practices and norms between the sites/departments? How would you assess these practices – some differences, very different, or can't compare? How many practices would you clearly identify? Describe Can you describe the position within the department/hospital of the major players involved in the AAIS implementation process? Do you feel that these differences had played a role in the process of collaboration (information/knowledge transfer/share) during the AAIS project? Please describe a concrete example.
Boundaries between fields	Were there any challenges/difficulties at the outset of the project due to differences in work practices of the other sites? Were you able to correctly assess these differences at the outset of the project? Or did you discover them during the AAIS implementation?
Initial IS design functionality	What were the objectives of the project? Can you describe the initial (planned) design of the new AAIS?
Project timeline and salient events	Tell me about the history (timeline, events) and the nature of the AAIS implementation project? Milestones. Other important events.
Final IS Functionality	In your opinion, how different was the functionality of the final version of the system from the initial (planned) design?
Fields of practice at the outcome	Once the system was implemented, did the work practices of the users of the new system change? If yes, how different were they at the end of the implementation from how they were at the outset of the implementation of the AAIS? How would you describe the change in these practices today: it was marginal or it touched the core of the practices?
Individual capital and valuation process	Did you find that there were other team members that you find them influential during the system implementation due to their expertise, knowledge, or status within the organization? Which ones? What was the main benefit of having these individuals as members of the project team for the system outcome? Was their input valuable? If so, why?
Role and actions (discourses) of the boundary spanners	Would you call yourself a boundary spanner? (*Interviewer will provide a layman definition*) If yes, what were your actions as boundary spanner? Decisions regarding changes to the original functionality of the system were taken during the implementation process – do you think that these decisions were influenced by some of the team members? Did any of the team members try to influence the way the system was designed? If yes, do you think that this was due to their prior experience in the domain, their knowledge, or the fact that they were reflecting the needs/interests of the department/pre-merger hospital that they were representing? Can you think of an incident when you and the rest of the project stakeholders did not agree about the functionality of the system? How often did this happen? Did you try to convince the others of your decision? How? If not, why not?